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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/606,505	06/29/2000	David Black	07072-112001	7480

22494 7590 03/27/2003

DALY, CROWLEY & MOFFORD, LLP
SUITE 101
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EXAMINER

NGUYEN, MIKE

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 03/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/606,505

Applicant(s)

BLACK ET AL. 10

Examiner

Mike Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

1. Claims 1-16 are pending for the examination.

Drawings

2. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1, 5, 9, and 13 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 09/540,828, 09/539,966, and 09/540,825 in view of Baum et al. (U.S. Pat. No. 5,166,674).

Although the conflicting claims are not identical, they are not patentably distinct from each other

because "a command field" would ^{have} ~~not~~ been obvious to be included in the system interface in

order to indicate whether the directors receiving the message or not.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et al. (U.S. Pat. No. 5,214,768) further in view of Baum et al. (U.S. Pat. No. 5,166,674).

7. As to claim 1, Martin teaches a data storage system for transferring data between a host computer/server and a bank of disk drives through a system interface (see figure 1 elements 12, 42, 48), such system interface comprising:

a plurality of first directors coupled to the host computer/server (see figure 1 elements 14, 16, 18, 19 and column 5 lines 20-26);

a plurality of second directors coupled to the bank of disk drives (see figure 1 element 48 and column 5 lines 49-58);

a data transfer section coupled to the plurality of first directors and second directors (see figure 2 elements 82, 92 and column 7 lines 25-34 and figure 7 and column 14 lines 4-18);

a message network coupled to the plurality of first directors and the plurality of second directors, such first and second directors controlling data transfer between the host computer and the bank of disk drives in response to messages passing between the directors through the message network as such data passes through the data transfer section (see figures 1 element 40 and column 5 lines 63-68 and column 6 lines 1-15 and column 9 lines 29-44); and

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Although the system interface taught by martin shows substantial features of the claimed invention (discussed above), it fails to explicitly teach: each one of such message transferred through the message network is associated with a descriptor, such descriptor having a command field indicating the one or ones of the directors which are to receive such message, such command field having a plurality of bits, each bit being associated with a corresponding one of the directors, one logic state of such bit indicating that such corresponding director is to receive the message and another logic state of such bit indicating that corresponding director is to receive such message. Baum; however, teaches each one of such message transferred through the message network is associated with a descriptor, such descriptor having a command field indicating the one or ones of the directors which are to receive such message, such command field having a plurality of bits, each bit being associated with a corresponding one of the directors, one logic state of such bit indicating that such corresponding director is to receive the message and another logic state of such bit indicating that corresponding director is to receive such message (see figure 11 and column 11 lines 50-68 and column 12 lines 1-51). Given the teaching of Baum, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Martin by employing the well-known or conventional feature of the data storage system, such as taught by Baum, in order to indicate whether the directors receiving the message or not.

8. As to claim 2, Martin teaches the data storage system recited in claim 1 wherein the message network transmits each message sequentially to a plurality of the directors (see column 5 lines 63-68 and column 1-15)

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9. As to claim 3, martin fails to explicitly to teach: each one of the directors has a mask stored therein, such mask having a plurality of bits, each one of such bits of the mask being associated with a corresponding one of the directors, each one of the bits indicating the an availability or unavailability of the corresponding one of the directors. Baum; however, teaches each one of the directors has a mask stored therein, such mask having a plurality of bits, each one of such bits of the mask being associated with a corresponding one of the directors, each one of the bits indicating the an availability or unavailability of the corresponding one of the directors (see figure 10 and column 8 lines 41-68 and column 9 lines 1-49). Given the teaching of Baum, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Martin by employing the well-known or conventional feature of the data storage system, such as taught by Baum, in order to indicate the availability or unavailability of the directors.

10. As to claim 4, martin fails to explicitly to teach: the message network compares the command field of a message to be transmitted with the mask and sequentially transmits the message to only those directors which are indicated by the mask as being available. Baum; however, teaches the message network compares the command field of a message to be transmitted with the mask and sequentially transmits the message to only those directors which are indicated by the mask as being available (see figure 11 and column 11 lines 50-68 and column 12 lines 1-51). Given the teaching of Baum, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Martin by employing the well-known or conventional feature of the data storage system, such as taught by Baum, in order to ensure the message transmitting to directors.

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11. Claims 5-16 are of similar scope as claims 1-4 and are therefore rejected under same rationale.

Conclusion


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Nguyen whose telephone number is (703) 305-5040 or e-mail is mike.nguyen@uspto.gov. The examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

The appropriate fax number for the organization where this application or proceeding is assigned is (703) 746-7240.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Jeffrey Gaffin, can be reached on (703) 308-3301.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-3900.

Mike Nguyen
Patent Examiner
Group Art Unit 2182


JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

03/20/2003